Amendment in Reply to Office Action of December 31, 2007

IN THE SPECIFICATION

Please amend the specification as follows:

Replace the paragraph on page 8, between lines 17-28 of the specification with the following:

Figure 4 illustrates the logic circuit 20' of a control unit 20 according to the invention. The capacitive dividers 40, 41 and 42, 43 are connected to the input pins 82 and 83 of the logic circuit 20'. These voltage levels are transferred to logic voltage levels via two Schmitt triggers 48, 49. One trigger output 67 corresponding with the voltage in connection node 16 is inverted with inverter 50, so that this output is high when a zero voltage is detected. On the assumption that the circuit is operated in the second commutation interval, and hence switch M1 is permanently open (thus output 68 is low), the output 69 of the XOR 51 switches from low to high when a zero voltage is detected. This causes a rising edge at the entrance of the master flip-flop 50_{T} 52, so that the output O of the master flip-flop 52 is high, and hence the output pin 61 of the driver 58 is high as well. This output pin is

connected to a level shifter circuit 59 for switching on the switch which is being operated, which is determined by output pin 60 of the logic circuit 20'.

Replace the paragraph on page 10, between lines 23-31 of the specification with the following:

The logic circuit 20' described in Figure 4 can also be used to control the circuit of Figure 9. The connections are different however; output pin 60 is not used, whereas output pin 62 now provides the synchronized commutation signals. Furthermore only one capacitive divider is used and output pin 62 is not connected via diodes to the input pins 82, 83, but is connected to the level shifter and to the input pin 82 of the logic circuit 20'. In this way a different synchronization is obtained during commutation, as can be seen in Figure 10. Here the role of the MOSFET switches M1, M2 is changed when the current through the inductor 28 is maximum. Note however that the voltage over the switch which is going to become active is substantially zero at that time.